OBSTETRICS

UNDER THE CHARGE OF

EDWARD P. DAVIS, A.M., M.D.,

PROFESSOR OF OBSTETRICS IN THE JEFFERSON MEDICAL COLLEGE, PHILADELPHIA.

Two-stage Operation for Carcinoma of the Pregnant Uterus under Paravertebral Anesthesia.—MASON and CONRAD (*Surg., Gynec. and Obst.*, July, 1918) raise the question as to whether it may not be advisable to operate upon pregnant patients having carcinoma in two stages rather than at one time, as is usually done. They describe the following case: The patient, aged twenty-six years, had given birth to one child seven years before, followed by normal recovery. Her previous health had been good. Her last menstruation had occurred about seven months before entering the hospital. She had irregular hemorrhage for three months and pain along the inner surface of the thigh. On examination the patient was poorly nourished, anemic, with hemoglobin index of 55 per cent. The pregnant uterus extended half-way between the umbilicus and ensiform cartilage. On vaginal examination the cervix was hardened, hypertrophied and bled easily upon touch. The patient's condition was so poor that it was thought best no operation should be undertaken; hemorrhage was checked by gauze packing, and the patient was given rest, tonics and forced nourishment until the hemoglobin reached 70 per cent. Sixteen days after entrance to the hospital the patient was given anesthesia by injection from the eighth dorsal to the third lumbar vertebræ and all the sacral segments. The Cesarean operation was performed in sixteen minutes, the abdominal wall remaining relaxed. The baby was ill nourished but cried on delivery, and died six hours later. After the Cesarean operation was completed the cervix was cauterized with the Paquelin cautery and the patient made a good recovery from the operation, but later developed irregular temperature, although the hemoglobin rose to 80 per cent. Twenty-two days after the first operation, under similar anesthesia, the uterus was completely removed. The patient had a very rapid pulse immediately after the operation, but this gradually subsided. In about four weeks after the second operation she left the hospital at her own request. The malignant growth returned and the patient died between four and five months after the first operation. The method of anesthesia employed in this case is of interest: The anesthetic was placed outside the spinal canal about the vertebræ and in close proximity to the nerve trunks as they emerge from the spinal canal through the foramen; each segment is blocked separately, and this is done along the back by using the ribs in the dorsal and transverse processes in the cervical and lumbar regions as guides. A needle the proper length is introduced vertically over the bony landmarks and pushed forward until it meets its resistance; from this fixed point it is not difficult to find the nerve. In the dorsal region the needle is introduced on a level of the spinous process,

about 4 cm. from the medial line, and pushed horizontally inward until the point strikes the rib, then withdrawing the needle nearly to the skin the angle is changed so as to let it pass just underneath the rib and the needle pushed $\frac{1}{2}$ to $\frac{3}{4}$ cm. deeper. Through the point of the needle lying in the intercostal space, 15 c.c. of 0.5 per cent. solution of novocain, with 1 to $\frac{1}{100}$ adrenalin, is injected. This is repeated on both sides as needed. A somewhat similar proceeding is employed in the sacral region. Before the anesthetic patients are given 10 grains of veronal on the night before the operation and scopolamin and narcophin before the operation. These doses are varied in accordance with the effect desired. Blood-pressure is not much changed and there is little or no depression. The anesthesia continues from two to four hours and then gradually disappears. Patients occasionally have a dry throat which is relieved by taking sips of water.

Blood-pressure in Pregnancy.—DANFORTH (*Am. Jour. Obst.*, June, 1918) gives the result obtained by the study of blood-pressure in 115 private patients and 332 hospital patients. Upon the first series a total of 608 observations were made, the number upon one individual varying from one to seventeen and the age of the patient from twenty-two to forty-three years. The average systolic pressure calculated from the total number of observations is 114, but one patient gave a pressure less than normal, this being 93. There were 24 cases whose ages varied from twenty to forty-three years, and in them the average blood-pressure was 121; the highest pressure was 129. In the hospital cases the pressure reading was done in almost all immediately after delivery. Of those who entered the hospital with pressure below 140 the average pressure on entrance was 119; when the pressure was taken immediately after delivery the average pressure was 116. In all cases when the pressure was 140 or more the history was carefully examined and every effort made by correspondence to find the previous histories of the patient. So far as labor is concerned there is reason to believe that the advent of labor was followed by rise in blood-pressure. From these investigations he concludes that the average blood-pressure of pregnant women is less than that of non-pregnant. In most cases labor causes a rise of arterial tension. The toxemia of pregnancy is accompanied by rise of pressure except in very rare instances, and this rise usually precedes other symptoms.

Two Cases of Extraperitoneal Cesarean Section for Contracted Pelvis.—BROADHEAD (*Am. Jour. Obst.*, 1918) reports two cases of contracted pelvis treated by extraperitoneal section. The first was a negro primipara, aged eighteen years, brought to the hospital in labor. The pelvis was contracted and repeated vaginal examinations had been made. The position and presentation of the fetus was the second with vertex presentation. At operation a suture of plain catgut was passed around the parietal and uterine peritoneum so as to form an enclosed area six inches in length and oblong in outline; incision in the uterus was about five inches long; this was made through the enclosed extraperitoneal layer. After the delivery of the child the uterine cavity was packed with iodoform gauze and the wound sutured with No. 2 chromic catgut. The baby was born in good condition and weighed $9\frac{1}{2}$ pounds. The patient had a high temperature for four

days after operation, then it gradually fell and the patient finally made a good recovery. Eight months later the uterus was suspended or possibly fixed to the abdominal wall. The cervix was closed, firm and high up in the pelvis. The second patient was a primipara who was supposed to have gone over time; to bring on labor an unsuccessful attempt was made to introduce a bag, and a dose of pituitrin was given. The patient was in labor forty-eight hours, having contractions every five to ten minutes, and was examined by five different physicians. On admission to the hospital she was in very poor physical condition: there was feeble uterine contractions and the fetal heart was plainly heard. The extraperitoneal method was chosen because of the many examinations the patient had. Pituitrin was given by hypodermic just before the abdominal wall was incised. As the chorion was opened a foul-smelling, yellowish, purulent fluid escaped freely and was collected for bacteriological examination. The child, a male, weighing 7⅝ pounds, was delivered without difficulty. Bleeding was moderate, the leukocyte count was 9000 and in spite of the discharge the patient made a good recovery. She was discharged, with the baby, twenty-eight days after her admission. The scar was three inches long, half above and half below the umbilicus. The bacteriological examination of the amniotic fluid showed abundant staphylococci; blood culture done immediately after the operation showed the same germ and some contamination of it. Another case of extraperitoneal Cesarean section was reported by Langrock (*Am. Jour. Obst.*, June, 1918). In his case the indication was contracted pelvis and patient in labor twenty-nine hours before coming to the hospital, during which time she had strong regular pain every five to eight minutes. The membranes ruptured spontaneously at the beginning of labor; the cervix did not dilate. In all the patient had many vaginal examinations. At operation the cut edge of the peritoneum was sutured to the anterior surface of the uterus. One cubic centimeter of pituitrin was given hypodermically and the uterus opened in the midline. The baby and placenta were delivered in the usual way and the bleeding was profuse, but was readily controlled by iodoform packing. The anterior edge of the peritoneum was sutured to the anterior surface of the uterus, leaving an area of the anterior uterine wall exposed. The uterine incision was covered with a continuous suture of plain gut. The final examination of the patient showed the uterus adherent to the anterior abdominal wall over a small area, with the whole of the posterior wall of the uterus, the fundus and a portion of the anterior wall being left to enlarge in a succeeding pregnancy. Mother and child made a good recovery.

Blood Transfusion by the Citrate Method in Bleeding in the Newborn.—LEWISOHN (*Am. Jour. Obst.*, June, 1918) reports his experience in 9 cases of newborn infants suffering from hemorrhage and treated by transfusion by the citrate method. By this method it is possible to take the blood from the donor at the patient's home and bring the citrated blood to the hospital for use; 100 c.c. is the quantity usually employed. A superficial arm vein in the elbow region of the baby is exposed by a very small incision. The blood is heated to body temperature by warm water and introduced through a fine cannula. As a rule, bleeding stopped immediately and the patient began to gain strength.

Examination of the record of the 8 cases shows two deaths, one in which the patient went to another hospital after examination. In most of the infants the hemorrhage ceased so soon as treatment was begun.

Postpartum Eclampsia.—CASSELBAUM (*Am. Jour. Obst.*, June, 1918) had an opportunity of observing what is comparatively rare, namely, postpartum eclampsia. The patient was aged twenty-four years and the pregnancy in question was her fourth. Four years previously she had had pain over the region of the gall-bladder, was tender and had slight fever. This subsided under rest, liquid diet and ice-bag. A diagnosis of appendicitis and cholecystitis was made, but no operation was undertaken. In the present instance the patient had given birth to a vigorous female child. Two hours after the birth of the child she had a general convulsion lasting two minutes, and up to the time of her reaching the hospital she had four in all. On admission to the hospital the patient was well nourished and well developed, but in a stupor from which she could not be aroused. There was marked jaundice; the pulse was 80; the heart and lungs were negative. There was tenderness in the right upper quadrant from the costal border to three inches below the ribs. A catheterized specimen of the urine showed a large quantity of albumin, casts, blood cells and bile. During the night following admission she had thirty convulsions and was given veratum viride until the pulse reached 60. After this treatment she had five more convulsions. Three days after admission she became rational, had no more convulsions, but was jaundiced and tender over the gall-bladder. Her recovery was complicated by attacks of mental disturbance and finally by a severe pulmonary edema. She made a tedious recovery.

Interstitial Pregnancy.—STONE (*American Journal of Obstetrics*) reports an interesting case of a multipara, five and one-half months pregnant, with symptoms of intra-abdominal hemorrhage. Upon examination the abdomen was distended by a tumor which appeared movable but was strongly inclined to the right side. It was oval in form and unlike a pregnant uterus. As the patient's condition improved, there was slight delay in operating, and when the abdomen was opened there was a free hemorrhage from a rupture in the upper portion of the tumor. Supravaginal hysterectomy was performed, and on examining the specimen it was found that the blood had come from the thin uterine wall. The pregnancy had been interstitial and the growth of the embryo had greatly thinned the uterine wall and lead to hemorrhage.

Emergency Labors.—CHRISTOPHER publishes (*Jour. Am. Med. Assn.*) his notes on 1300 ambulance cases in New York City. Among these there were 19 cases of labor, 14 of incomplete abortion, and 1 of pernicious nausea of pregnancy. No deliveries were made on ambulance calls. Those patients found to be in labor were taken to the hospital as rapidly as possible. In cases in which the ambulance surgeon found the baby born on his arrival the cord was cut and the patient was given the opportunity of going with her baby to the hospital.